

NOTICE – Your report to the Census Bureau is confidential by law (Title 13, U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.		CENSUS USE ONLY SURVEY CODE 4001 INDUSTRY CODE WEIGHT STATE ADDRESS SIC CODE 	FORM RD-1 (12-21-98)	U.S. DEPARTMENT OF COMMERCE BUREAU OF THE CENSUS COLLECTING AND COMPILING AGENT FOR THE NATIONAL SCIENCE FOUNDATION
RETURN TO <div style="border: 1px solid black; padding: 5px; display: inline-block;"> Bureau of the Census 1201 East 10th Street Jeffersonville, IN 47132-0001 </div>			SURVEY OF INDUSTRIAL RESEARCH AND DEVELOPMENT DURING 1998 In correspondence pertaining to this report refer to this CENSUS FILE NUMBER (11 digits) ▶	
Name of person who supplied 1997 data				
MANDATORY REPORTING REQUIREMENTS Data supplied in items 1A and 1B and in item 3A, line 3, columns 4 and 6, for 1998 on this form will satisfy the mandatory reporting requirements. (Title 13, U.S. Code.) PLEASE READ ENCLOSED INSTRUCTIONS BEFORE COMPLETING THIS FORM.				

(Please correct any error in name and address, including ZIP Code.)

THIS REPORT SHOULD COVER YOUR ENTIRE CONSOLIDATED DOMESTIC ENTERPRISE, INCLUDING ALL U.S. SUBSIDIARIES AND DIVISIONS.

The term "company" on this form refers to the consolidated domestic enterprise.

- Please complete this form by the date printed at the top of this page and return it in the envelope provided. Make a copy for your records.
- Please read the enclosed instructions before completing this form.
- Report figures in thousands of dollars. Reasonable estimates are acceptable.
- Explain significant changes in year-to-year data in the remarks section.

COVERAGE REVIEW

Was this company owned or controlled by another company on December 31, 1998?

1303 ☐ Yes – See instructions for Coverage Review.1304 ☐ No – Continue with item 1**Section I – GENERAL COMPANY DATA**

Item 1 – RECEIPTS AND EMPLOYMENT FOR THE COMPANY							Item 2 – NUMBER OF RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS		
A. Net sales, operating receipts and revenues of domestic operations of this company (Report in thousands of dollars) EXCLUDE domestic intra-company transfers and sales by foreign subsidiaries. INCLUDE receipts for sales of products and services provided to other companies, individuals, U.S. Government agencies, and foreign countries.							Apportion on a full-time equivalent basis. See page 4 of the instruction booklet for more detail.		
			1997			1998			
			Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	
			101			102			
			Number			Number			
			111			112			
B. Domestic company employment in all activities during the pay period which includes the 12th of March 1998 (Item 1 of I.R.S. Form 941, if one Form 941 was filled for the entire company.)							A. Federal research and development		
							January 1998		January 1999
							Number		Number
							503		504
							505		506
B. Company and other research and development							501		502
C. TOTAL – Sum of lines 2A and 2B →									

PLEASE CONTINUE ON REVERSE.

Section I – GENERAL COMPANY DATA – Continued

Item 3 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT (Report in thousands of dollars)		1997									1998								
		Federal funds (1)			Company and other (2)			Total ((1)+(2)) (3)			Federal funds (4)			Company and other (5)			Total ((4)+(5)) (6)		
		Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
		301			302			303			304			305			306		
A. Performed within the company																			
1. Basic research																			
2. Applied research and development		311			312			313			314			315			316		
	a. Applied research																		
	b. Development	321			322			323			324			325			326		
	c. Total – Sum of lines a and b	331			332			333			334			335			336		
3. Total – Sum of lines 1 and 2.c.		341			342			343			344			345			346		
B. Outside the company – Federal funds and company funds for research and development performed by others outside the company within the United States (Exclude from 3A.3. above)		351			352			353			354			355			356		
C. Foreign – Company funds for research and development performed by foreign subsidiaries or other organizations outside the United States (Exclude from 3A.3. and 3B. above)					362								365						
D. TOTAL – Company and other funds, except Federal (This line represents company sponsored research and development with the exception of "other funds.") – Sum of 3A.3, B, and C, (column 5) —→					372								375						
Item 4 – COMPANY AND OTHER FUNDS, EXCEPT FEDERAL, FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BUDGETED FOR THE YEAR 1999													1999						
													Bil.	Mil.	Thou.				
													401						
(Comparable to the 1998 figure reported in Item 3A.3., column (5).)																			

Section II – RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY

Item 5 – COSTS INCURRED FOR FEDERAL RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY PRINCIPAL GOVERNMENT AGENCY								Item 6 – COSTS INCURRED FOR RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY MAJOR TYPE OF EXPENSE									
Allocate the total reported in Item 3A., line 3, column (4), Federal funds, into the following principal agencies:		Key code	1997 (1)			1998 (2)			Allocate the total reported in Item 3A., line 3, column (6), total company research and development – Exclude lines 3B. and 3C.		Key code	1997 (1)			1998 (2)		
			Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.			
1. Department of Defense	01								1. Wages and salaries of research and development personnel – Include scientists and engineers, technicians, secretaries, and other personnel.	01							
2. National Aeronautics and Space Administration	02								2. Costs of materials and supplies consumed – Do not include in this item components, models, and other materials supplied by other research organizations.	02							
3. Department of Energy	03								3. R & D depreciation	05							
4. Other Federal agencies	04								4. Other costs – Include service and supporting costs, and share of overhead.	03							
5. TOTAL COSTS – Sum of lines 1 through 4 —→	05								5. TOTAL COSTS – Sum of lines 1 through 4 —→	04							

FORM **RD-1 (Item 7)**
(12-21-98)**SURVEY OF INDUSTRIAL RESEARCH
AND DEVELOPMENT DURING 1998**U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
COLLECTING AND COMPILING AGENT FOR
THE NATIONAL SCIENCE FOUNDATION**Refer to this CENSUS
FILE NUMBER in any
correspondence
pertaining to this report****Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued****Item 7 — COST OF RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY BY STATE**

Allocate the total reported in Item 3.A., line 3, columns (4) and (6), by the States in which your various research and development laboratories or facilities are located. Estimate the costs associated with each State. If necessary, you may report up to 10 percent of your total as "Not distributed by State."

Key code 9	State	1997						1998						Key code 9	State	1997						1998					
		Federal funds (1)			Total funds (2)										Federal funds (1)			Total funds (2)									
		Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou		Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	Bil.	Mil.	Thou	
01	AL													27	MT												
02	AK													28	NE												
03	AZ													29	NV												
04	AR													30	NH												
05	CA													31	NJ												
06	CO													32	NM												
07	CT													33	NY												
08	DE													34	NC												
09	DC													35	ND												
10	FL													36	OH												
11	GA													37	OK												
12	HI													38	OR												
13	ID													39	PA												
14	IL													40	RI												
15	IN													41	SC												
16	IA													42	SD												
17	KS													43	TN												
18	KY													44	TX												
19	LA													45	UT												
20	ME													46	VT												
21	MD													47	VA												
22	MA													48	WA												
23	MI													49	WV												
24	MN													50	WI												
25	MS													51	WY												
26	MO													52	*												
53	TOTAL COSTS — Sum of lines 1 through 52 —————→														953												

PLEASE CONTINUE ON REVERSE.

Section II — RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE DOMESTIC COMPANY — Continued

Item 8 — ENERGY RESEARCH AND DEVELOPMENT PERFORMED WITHIN THE COMPANY

• Report expenditures for energy research and development by type of energy sources. Include the project cost or portion of project cost incurred for the purpose of increasing energy resources or capabilities. These expenditures should be included in Item 3.A., line 3, columns (4) and (6).

• Estimate expenditures for energy research by energy source for 1999.

	Key code	1997						1998						1999					
		Federal funds			Total funds			Federal funds			Total funds			Projected Federal funds			Projected total funds		
		(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(3)	(4)	(5)	(6)	(7)	(8)
	10	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
A. Nuclear	03																		
B. Fossil fuels	12																		
C. Geothermal, solar, conservation and utilization	16																		
D. All other energy	17																		
E. TOTAL — Sum of lines A through D →	18																		

Section III — RESEARCH AND DEVELOPMENT PERFORMED OUTSIDE THE DOMESTIC COMPANY WITH COMPANY FUNDS

Item 9 — FOREIGN RESEARCH AND DEVELOPMENT BY COUNTRY

Report the amount of total foreign research and development, Item 3.C., column (5), for the countries with the largest expenditures. If necessary, write in countries not listed. Report the balance of foreign research and development on line 9.

	Key code	1997			1998		
		(1)	(2)	(3)	(4)	(5)	(6)
	12	Bil.	Mil.	Thou.	Bil.	Mil.	Thou.
1. Canada	01						
2. Germany	02						
3. France	03						
4. Japan	04						
5. United Kingdom	05						
6. Puerto Rico	06						
7. Other — Specify	07						
8. Other — Specify	08						
9. Balance not distributed	09						
10. TOTAL — Sum of lines 1 through 9 →	10						

Item 10 — COVERAGE AND OPERATIONAL STATUS

Are research and development expenditures for the entire domestic enterprise, including subsidiaries, reported on this form?

1301 ☐ Yes 1302 ☐ No — Please explain in the "Remarks" section below

Item 11 — CERTIFICATION — This report is substantially accurate and has been prepared in accordance with instructions

Name of person to contact regarding this report		Telephone	Area code	Number	Extension
Signature of authorized official		Title			Date
801 Remarks					